

Application Serial No. 10/566,849

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Listing of the Claims:

1-37 (Canceled)

38. (Currently Amended) A projection exposure apparatus, comprising a projection lens having a last optical surface on the image side that is immersed in an immersion liquid that contains highly pure water and at least one additive that dissociates in the water and is, in the dissociated state, transparent for the projection light used in the projection exposure apparatus, wherein the at least one additive dissociates in the immersion liquid so that the electrical conductivity of the immersion liquid is between about 4×10^{-8} S/m and about 4×10^{-6} .

39. (Canceled)

40. (New) The apparatus of claim 3938, wherein the at least one additive dissociates in the immersion liquid so that the electrical conductivity of the immersion liquid is between about 3.5×10^{-8} S/m and about 6×10^{-7} S/m.

41. (New) The apparatus of claim 3938, wherein the highly pure water contains heavy water.

42. (New) The apparatus of claim 3938, wherein the at least one additive contains at least one of the group consisting of: LiF, NaF, CaF₂, SrF₂ or MgF₂.

43-45. (Canceled)